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PATENT APPLICATION

For

AN AIRLINE RESERVATION SYSTEM THAT SUPPORTS GUARANTEED RESERVATIONS FOR A PREFERRED CATEGORY OF SEATING

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AN AIRLINE RESERVATION SYSTEM THAT SUPPORTS GUARANTEED RESERVATIONS FOR A PREFERRED CATEGORY OF SEATING

FIELD

A system and method for processing airline reservations for a preferred category of seating and, more particularly, a system which optimizes seating arrangements for guaranteed reservations to accommodate additional seating requests as they are received.

BACKGROUND

Airlines are continuously trying to provide passengers with enhanced services in order to maintain their current passengers as loyal customers and to attract new business. For example, frequent flier programs have been implemented, additional direct flights have been added and gourmet and specialty menus have been served. However, limited attention has been given to processing reservations for preferred seating on an aircraft, which, for many passengers is a significant aspect of the flight.

Traditionally, passengers were unable to secure seating assignments until check-in. However, advances in technology have allowed passengers and travel agents to communicate directly with an airline's reservation system and procure seat

assignments either when the reservation is made or at any point prior to check-in. The majority of airlines allow seat assignments to be secured 30 to 90 days in advance of a flight. When requesting seat assignments, most passengers usually have a preference for a category of seating. (A "category" of seating, as the term is used herein, is the type of seating available on commercial airlines, including, but not limited to window seats, aisle seats, emergency exit row seats, bulkhead seats, and seats near galleys and restrooms.) In existing reservation systems, the passenger can request a particular category of seating or a direct seat assignment at the time of making the reservation, wherein the reserving agent queries the system to determine if the passenger's request can be granted. Most travel agents are able to view a seat map of the flight to determine which seats are available and how best to accommodate a passenger's seating preference. Additionally, when processing a reservation via the internet, passengers can also view seat maps on the web sites of most major airlines to determine if a desired seat is available. If a seat is available in the passenger's preferred seating category, then the passenger is immediately assigned to that seat and the status of that seat is changed from available to

unavailable in the seating inventory database and on the seat map. If, however, there is no available seat in the passenger's preferred category of seating, then the passenger is arbitrarily assigned to the next available seat. Therefore, earlier-booking passengers have more seating options to choose from as opposed to later-booking passengers.

However, some airlines still do not allow seat assignments to be procured until check-in begins, usually two to three hours before the flight's departure. Additionally, many passengers choose not to secure seat assignments until check-in, or are unaware of the ability to procure seating prior to check-in. In such situations, passengers securing seat assignments at the earlier part of the check-in process have more seating options available than those passengers checking in at a later stage of the process. Given the existing seating assignment practices used by current reservation systems, passengers who are later-booking travelers and those who are late arrivals at the check-in counter will have a limited selection when choosing seats for a given flight.

An airline's ability to accommodate more of its passengers' requests for a particular category of seating is

hampered by the fact that current reservation and check-in systems do not allow the airline to reassign seating to accommodate additional requests. For example, if passenger A prefers a window seat, then passenger A would be content sitting at any window location on the plane and the airline could reassign passenger A to another window location in order to accommodate passenger B's request for a window seat in row five. Existing airline reservation systems currently support only three reservation states: (1) a confirmed reservation with an assigned seat; (2) a confirmed reservation without an assigned seat; and (3) a waiting list. Additionally, the existing reservation systems do not allow assigned seats to be reassigned. Only when a passenger's reservation is cancelled and the seat selection becomes available can a confirmed passenger or a new passenger be assigned to the vacant seat. Thus, passengers can only be confirmed for a specific seat assignment and cannot be reassigned by the airlines in order to accommodate additional requests.

SUMMARY

The above-identified problems are solved and a technical advance is achieved by an airline reservation system that supports guaranteed reservations for a preferred category of

seating. In accordance with one aspect of the reservation system, there is provided a method for processing airline reservations for a preferred category of seating, comprising receiving a request for the preferred category of seating, determining if the preferred category of seating is available, and guaranteeing the preferred category of seating.

In accordance with another aspect of the reservation system, there is provided a method for processing airline reservations for a preferred category of seating, comprising receiving a request for multiple preferred categories of seating, determining which of the multiple preferred categories of seating are available, and guaranteeing at least one of the preferred categories of seating.

A request for a preferred category of seating can be received and processed at the time of making the reservation, prior to check-in, or at the check-in counter. In one embodiment, the request is received and processed by the airline reservation controller to determine whether or not the request can be accommodated given the earlier requests that have already been guaranteed a category of seating. An advantage of the reservation system is that the system can reassign passengers to different seats within their guaranteed

category of seating in order to satisfy a subsequent passenger's request. Once the passenger is guaranteed a category of seating, the passenger is assigned to a "flexible" seat assignment. However, the passenger can be reassigned to a different seat within the same category of seating based on another request. Therefore, in the reservation system, the passenger is not confirmed for a direct seat assignment, but, is guaranteed a category of seating.

The flexible seat assignments are then translated to permanent seat assignments at a predefined period prior to the flight's departure. At this transition point, the passenger is permanently assigned to a seat which satisfies his/her request for a preferred category of seating, and the passenger cannot be reassigned to a new seat.

Further features and advantages of an airline reservation system that supports guaranteed reservations for a preferred category of seating will be obtained by reference to the following detailed description and drawings.

While the embodiments of the invention will be described with reference to an airline reservation system that supports guaranteed reservations for a preferred category of seating, the method and apparatus described herein are equally

applicable to other types of reservation systems wherein requests for a preferred category of service are made. For example, the reservation system could be utilized for hotel rooms as well as any venue or event having assigned seats within different categories of seating.

BRIEF DESCRIPTION OF DRAWINGS

FIG. 1 is a block diagram illustrating an airline reservation system that supports guaranteed reservations for a category of seating;

FIG. 2 is a block diagram illustrating an exemplary embodiment of the airline reservation central controller used in the system of FIG. 1;

FIG. 3 illustrates an exemplary flight inventory database stored in the central controller of FIG. 2;

SUBA1 ~~FIG. 4 illustrates an exemplary reservation database stored in the central controller of FIG. 2;~~

FIG. 5 is a flowchart illustrating an exemplary process of guaranteeing a passenger's request for a preferred category of seating; and

FIG. 6 is an exemplary timeline illustrating when airline seating is finalized.

It will be understood that the foregoing brief description and the following detailed description are exemplary and explanatory of the reservation system, but are not intended to be restrictive thereof or limiting of the advantages which can be achieved by the reservation system.

DETAILED DESCRIPTION

Introduction

The method and system of the reservation system satisfies the shortcomings of existing reservation systems by guaranteeing the passengers a category of seating and permitting the airline to reassign passengers in order to accommodate additional seating requests. The seating arrangements are then finalized at a predetermined time prior to the flight's departure and the passengers are permanently assigned to a seat within their preferred seating category.

System

FIG. 1 illustrates the system for receiving requests for a particular category of seating, evaluating the ability to accommodate seating requests and finalizing seating arrangements at a predetermined time prior to a flight's departure.

A "category" of seating, as the term is used herein, is the type of seating available on commercial airlines, including but not limited to window seats, aisle seats, emergency exit row seats, bulkhead seats, and seats near galleys and restrooms. The airline reservation central controller **100** also keeps track of passengers' demographics, such as whether a passenger is an adult, student, child or infant. Therefore, a passenger can request an additional category of seating, such as a seat distant from children and/or infants and also a seat adjacent to other passengers on the flight.

As shown in FIG. 1, the system includes an airline reservation central controller **100**, which is configured to receive, store, evaluate and transmit reservation and seating information with a passenger **120**, travel agent **110**, check-in controller **150** and boarding pass reader **160**. The check-in controller **150** and the boarding pass reader **160** are connected to the airline reservation central controller **100** and data is transmitted via a communication port.

The check–in controller **150** is located at the check-in counter and is utilized by a check-in agent to verify the passenger's reservation, process the photo-identification

received by the passenger, process the passenger's seating request if the passenger did not previously confirm a seating category, and issue a boarding pass.

The boarding pass reader **160** is located at the boarding gate and decodes and evaluates the information magnetically encoded on the boarding pass. The passenger or the boarding agent inserts the boarding pass into the boarding pass reader **160**, which is connected to the central controller **100**. The boarding pass reader **160** can update the information on the boarding pass by printing the updated information directly on the boarding pass or by issuing a new boarding pass. The boarding pass reader **160** and its function in finalizing seating arrangements will be discussed in further detail below in connection with FIG. 6.

In one embodiment, requests for a selected category of seating can be made directly by a passenger **120**, indirectly by a travel agent **110**, or by another third party such as a consolidator. The requests are received and processed by the airline reservation central controller **100** to determine if such requests can be accommodated.

Requests for a category of seating can be made at the time the reservation is made or at some point prior to

boarding. Seating requests are made either directly by the passenger **120** or indirectly by the travel agent **110** by contacting the airline reservation central controller **100** via telephone, facsimile, on-line access, e-mail, or some other communication medium. It is to be noted that each passenger **120** or travel agent **110** may employ a general-purpose computer for communicating with the airline reservation central controller **100**. In one embodiment, the general purpose computer of either a passenger **120** or travel agent **110** is comprised of a processing unit, a modem, memory means, and any software required to communicate with the airline reservation central controller **100**.

If the passenger **120** chooses not to confirm a category of seating at the time of the reservation or prior to check-in, then the passenger **120** can confirm seating during the check-in process. During check-in, the check-in controller **150** accesses the airline reservation central controller **100** to determine if the passenger's seat request can be accommodated.

As discussed in further detail below in connection with FIGs. 5 and 6, the central controller **100** determines whether the passenger's request can be accommodated based on earlier passenger requests that have already been guaranteed for a

category of seating. As subsequent requests are received, the central controller **100** reassigns passengers to different seats that satisfy their seating requests and satisfy the incoming requests. Therefore, once the passenger is guaranteed a seating category, the passenger is assigned to a "flexible" seat assignment which can be reassigned to accommodate additional requests.

A passenger's request can consist of multiple categories of seating, herein referred to as elements of a request. For example, a passenger may request a window seat in the first 10 rows of coach class. This request consists of two categories of seating, or two elements: element A is a window seat and element B is a seat in the first 10 rows of coach. In one embodiment, an airline may choose to limit the number of elements a passenger can specify within a request, or, the airline may choose to accommodate only a portion of the elements within the request.

FIG. 2 is a block diagram illustrating the system architecture of an exemplary airline reservation central controller **100**. As shown in FIG. 2, the central controller **100** is a conventional general purpose computer, including a central processing unit ("CPU") **215**, read-only memory ("ROM")

210 and random access memory ("RAM") **205**. The central controller **100** also includes a storage device **230** and a communications port **220**. The storage device may include hard disk magnetic or optical storage units, as well as CD-ROM drives or flash memory.

The CPU **215** executes program code stored in one or more of the ROM **210**, RAM **205** and/or storage device **230** according to conventional data processing techniques to carry out the functions and acts described in connection with the central controller **100**. The CPU **215** preferably comprises at least one high-speed digital data processor adequate to execute program modules for evaluating and optimizing seat assignments. The CPU **215** may be embodied as a single commercially available processor or as a number of processors operating in parallel.

CPU **215** comprises, in one embodiment, a microprocessor such as an Intel® Pentium Processor, which is electronically coupled to each of the central controller's **100** other elements (e.g., RAM, ROM, etc.).

The ROM **210** and/or storage device **230** are operable to store one or more instructions, while the CPU **215** is operable to retrieve, interpret and execute. In one embodiment, the CPU **215** includes a control unit, an arithmetic logic unit

(ALU) and a CPU local memory storage device. The control unit is able to retrieve instructions from the data storage device **230** or ROM **210** while the ALU is able to perform operations needed to carry out instructions. The CPU local memory storage device is capable of providing high-speed storage used for storing temporary results and control information.

As shown in FIG. 2, the communication port **220** connects the central controller **100** to the check-in controller **150**, the boarding pass reader **160**, as well as the passengers **120** and travel agents **110**. The communication port **220** includes multiple communication channels for simultaneously establishing a plurality of connections.

Database Formats

SUBA2 As discussed below in connection with FIGs. 3 and 4, the data storage device **230** includes a flight inventory database **240** and a reservation database **250**.

SUBA3 Samples of the contents of databases **240** and **250** are shown in FIGs. 3 and 4. The specific data and fields illustrated in these figures represent only sample records stored in each database. In most cases, the fields shown in FIGs. 3 and 4 are straightforward and self-explanatory. It is to be understood that the data and the fields, as well as the

number of databases, can be readily modified from the described embodiment and adapted to provide variations for receiving and processing requests for preferred categories of seating. Furthermore, each field may contain more or less information. For example, the address field may be divided into separate fields containing street address, apartment number, city, state, and zip code. Also, in other embodiments, the databases may be combined or divided into additional databases.

FIG. 3 illustrates an exemplary flight inventory database **240** that stores information for a given flight, on a per seat basis. For each seat, identified by the seat number in field **305**, the flight inventory database includes three seat descriptors: the class, position, and location of the seat in the aircraft, illustrated in fields **310**, **315**, and **320**, respectively.

FIG. 4 illustrates an exemplary reservation database **250** that stores information for each reservation, including passenger requests for a preferred category of seating. The reservation database maintains a plurality of records, such as records **475** - **499**, each associated with a different reservation. For each reservation identified by the

reservation number in field **405**, the reservation database **250** stores personal information, such as the passenger's name, address and credit card number, in fields **410**, **415**, and **420**, respectively. In addition, the reservation database **250** includes the passenger type in field **425**; that is, whether the passenger is an adult, student, child or infant. Further, the reservation database **250** stores the class of seating the passenger is confirmed for in field **430**, such as coach, business or first class. The reservation database **250** also includes the passenger's request for a selected category of seating, and allows a certain number of elements for each request to be stored. A passenger's request can consist of multiple elements. For example, a passenger can request an aisle seat in an emergency exit row adjacent to a certain passenger. This request has three elements: element A, an aisle seat, element B, a seat in an emergency exit row and element C, a seat adjacent to a certain passenger. The elements of the request are recorded in fields **435**, **440**, **445** and **450**, where the maximum number of fields may be predefined by the airline. The illustrative reservation database **250** shows fields for storing four elements of a request. In one embodiment, an airline may choose to limit the number of

elements a passenger can specify within a request. In a further embodiment, the airline may choose to honor only the first two elements or any two specified elements of the request. Once the overall seating evaluation is executed by the central controller **100**, the reservation database **250** stores guaranteed elements of the request in field **465**. Finally, the "flexible" seat assignment is stored in field **460** of the reservation database **250**. If, however, the passenger has requested a direct seat assignment, then that seat number is stored in field **465**. As the overall seating evaluation is executed and the passengers are reassigned, the "flexible" seat assignments are continuously updated. At any instant, the reservation database **250** can be accessed to determine what the current seat assignment is for a given passenger. Once the transition point, which is the instant when the "flexible" seat assignments become "permanent", is defined, the seat number in field **460** will be transferred to and stored in field **465**, the field for a "permanent" seat assignment. At this point, the passenger can no longer be reassigned to a different seat.

The illustrative reservation database **250** depicts some of the various types of requests that can be made by each

passenger. For example, reservation number 12345, identified by record **475**, indicates no preference for a selected category of seating. Therefore, "None" is recorded in the Element A field and the passenger may be assigned to any seat on the aircraft. However, the passenger may subsequently contact the airline prior to check-in or at the check-in counter and request a preferred category of seating. The reservation numbers 17542, 18444, and 18555, which are identified by records **480**,**485**,and **490**, respectively, illustrate common passenger requests for types of seats on an aircraft, such as window, aisle, exit row or bulkhead seats. Additionally, reservation numbers 18560 and 19555, which are identified by records **495** and **497**, respectively, illustrate passenger requests for seating associated with other passengers on the aircraft. The passenger may request to be seated adjacent to certain passengers, as illustrated in record **495**, Element B, or seated away from a type of passenger such as children, as indicated in record **497**, Element C. The final illustrative reservation, identified by record **499**, is confirmed for a direct seat assignment. "Direct Seat Assign" is recorded in the Element A field and the seat number is stored in field

465, which is the field reserved for permanent seat assignments.

Seating Request Process

FIG. 5 illustrates the process of receiving and evaluating a request from a passenger for a preferred seating category. In one embodiment, the seating request process is executed after the passenger has been confirmed for a flight and the passenger information has been entered into the reservation database **250**. In another embodiment, the seating request process is executed when a passenger inquires about a flight reservation, because that passenger will only accept a flight which can accommodate his/her preferred seating request(s).

As shown in FIG. 5, the central controller **100** receives a request for a preferred category of seating from either a passenger **120** or a travel agent **110** (on behalf of a passenger **120**) in step **505**. The request for a preferred seating category can be received and processed by the central controller **100** at three instances: (1) when the reservation is being made; (2) subsequent to the reservation but prior to check in; or (3) at the check-in counter. In one embodiment, if the passenger **120** chooses not to exercise his/her option of

requesting a preferred category of seating at the time of confirming the reservation, then the passenger **120** is notified that he/she may contact the airline reservation central controller **100** prior to check-in to request a seating category.

The passenger's request for a preferred seating category is entered into the reservation database **250** during step **505**. The request may consist of multiple categories of seating (that is, elements of a request) and, as previously discussed, the elements are recorded in separate fields in the reservation database **250**. For example, a passenger **120** can request a window seat in the first 10 rows of coach. This request has two categories of seating or two elements: element A, a window seat, and element B, a seat in the first 10 rows of coach. An additional illustrative request is an aisle seat, in an exit row, adjacent to another passenger on the aircraft. This request has three elements or three categories of seating, element A, an aisle seat, element B, a seat in an exit row, and element C, a seat adjacent to another passenger on the aircraft. Also, a passenger **120** can still request a direct seat assignment instead of a category of seating.

As seating requests are received and processed, the passenger **120** is assigned to a seat assignment which satisfies either all or some elements of the request. However, the passenger **120** can be reassigned to another seat which satisfies his/her guaranteed request in order to accommodate another passenger's request, hence the term "flexible" seat assignment. Therefore, the passenger **120** is not confirmed for a direct seat assignment but, is guaranteed a category of seating.

Once the passenger's request has been received, the central controller **100** evaluates the request to determine whether or not the passenger's request can be accommodated given the earlier requests that have already been guaranteed (step **510**). The central controller **100** reassigns passengers to different seats within their guaranteed category of seating in order to satisfy the incoming passenger's request.

Based upon the passenger's request stored in the reservation database **250** and the descriptors associated with each seat in the flight inventory database **240**, the central controller **100** evaluates both databases to identify the availability of seats that satisfy the passenger's request. If no seats are originally available, but flexibility is

evident, the central controller **100** revises and optimizes the seating assignments by reassigning individuals within their guaranteed seating category in order to satisfy the new request. The central controller **100** queries both the flight inventory database **240** and the reservation database **250** to determine the most optimal seating arrangement to accommodate both the guaranteed reservations and the incoming request. For example, if passenger B requests a window seat in row 15 of coach class, and passenger C, who is confirmed for a window seat only, is currently assigned to one of the window seats in row 15, then passenger C can be reassigned to another window seat in the aircraft in order to accommodate the request from passenger B. Additionally, if passengers D and E request a middle seat and a window seat in the last 5 rows of the aircraft adjacent to each another, and passenger F, who is confirmed for a middle seat only is currently assigned to the only available middle seat with an unoccupied adjacent window seat, then passenger F can be reassigned to another middle seat in the aircraft to accommodate the requests from passengers D and E.

Thereafter, the central controller **100** determines whether or not all elements or seating categories of the request can

be accommodated (step **520**). If the central controller **100** can accommodate all elements of the passenger's request, then, in step **545**, the central controller **100** records the elements of the request that have been accommodated as well as the "flexible" seat assignment in fields **460** and **465** of the reservation database **250**, respectively. Additionally, the reservation database **250** is updated to reflect the current "flexible" seat assignments for all confirmed reservations which may have been modified to accommodate the incoming request. If, however, the central controller **100** cannot accommodate all elements of the request, either because the guaranteed seating requests prevent it, or because the airline has chosen to accommodate only a certain number of elements of a request, then the central controller **100** determines if some elements of the request can be satisfied (step **525**). If some elements can be satisfied, the passenger **120** is notified of which elements of the request can be accommodated in step **535**. If it is determined in step **540** that the passenger **120** is satisfied, then the central controller **100** records the elements of the request that have been accommodated as well as the "flexible" seat assignment in fields **460** and **465** of the reservation database **250**, respectively (step **545**).

Additionally, the reservation database **250** is updated to reflect the current "flexible" seat assignments for all confirmed reservations which may have been modified to accommodate the incoming request (step **550**). If, however, the passenger **120** is not satisfied with the elements of the request that can be accommodated, then the central controller **100** can accept a different request for a preferred category of seating from the passenger in step **530**. Similarly, if the central controller **100** cannot accommodate any elements of the passenger's request, the central controller **100** can accept a different request for a preferred category of seating from the passenger **120** in step **530**. The central controller **100** then returns to step **510** to evaluate whether or not the passenger's new request can be accommodated and the process continues in the manner described above. In confirming the passenger's request, the central controller **100** guarantees that the passenger will be seated in his/her preferred category of seating. The central controller **100** does not issue a seat assignment at this time, but notifies the passenger that he/she is guaranteed to receive the elements of the request that were requested. For example, if a passenger **120** is confirmed for a window seat in an exit row, then that

passenger is guaranteed that he/she will be seated in one of the window seats in an exit row.

Transition Point

In one embodiment, the "flexible" seat assignments are converted to "permanent" seat assignments by the central controller **100** prior to the flight's departure. At this transition point **600**, the passenger **120** is permanently assigned to a seat which satisfies his/her request for a preferred category of seating and cannot be reassigned to a new seat. Therefore, the passenger **120** cannot be relocated once the "flexible" seat assignment becomes "permanent". FIG. 6 is an exemplary timeline illustrating the various instances when the transition point **600** occurs. The transition point **600**, which occurs at a predetermined time before the flight's departure, can collectively convert all of the flexible seats to permanent seats or it can convert seating on an individual basis.

In one embodiment, the transition point **600** occurs when check-in begins (**610**). At this point, all of the "flexible" seat assignments are converted to "permanent" seat assignments and reallocation of permanent seats is prohibited. Passengers who have not requested a category of seating prior to check-in

are assigned to seating according to traditional practices, such as scanning the flight inventory to determine the availability of the passenger's request and assigning the passenger to a direct or permanent seat assignment.

In a further embodiment, the "transition" point **600** occurs when boarding begins (**615**), which is usually 30 to 60 minutes prior to the flight's scheduled departure. Thus, passengers can request a guaranteed category of seating during the check-in process. The check-in controller **150** accesses the airline reservation central controller **100** to determine whether or not the passenger's request can be accommodated in light of previously confirmed requests. If the passenger's request can be accommodated, the check-in controller **150** guarantees the passenger a particular category of seating and issues a non-confirmed boarding pass to the passenger. (A "non-confirmed" boarding pass, as the term is used herein, is a boarding pass which does not have a seat number printed on it.) The non-confirmed boarding pass does, however, contain passenger information both magnetically encoded and visibly readable on the boarding pass. If, however, the central controller **100** accepts a passenger's request for an actual seat assignment during the reservation or the check-in

process, then the actual seat number is confirmed and imprinted on the boarding pass. Printing a non-confirmed boarding pass allows the airline reservation central controller **100** to continuously reassign seating to accommodate additional requests throughout the check-in process up to the time of boarding.

The passenger then proceeds to the gate where boarding occurs. At the point when boarding begins the transition point **615** occurs, wherein the flexible seat assignments become permanent. Any passengers who check-in after embarkation has commenced are no longer confirmed for a particular category of seating, and instead are assigned to a specific seat, based on availability and customer preference, as previously discussed.

The permanent seat assignments are printed upon the non-confirmed boarding pass when they are passed through the boarding pass reader **160** located at the embarkation point. The boarding pass reader **160**, which is described in detail in U.S. Patent No. 6,073,836, and incorporated by reference herein, decodes the information on the boarding pass and accesses the airline reservation central controller **100** to evaluate the decoded information and compare it to the information stored in the reservation database **250**. The

central controller **100** searches for the "permanent" seat assignment associated with the boarding pass of the passenger and prints the seat assignment on the boarding pass. The boarding pass reader **160** then notifies the central controller **100** that the passenger has boarded the aircraft.

In yet another embodiment, the transition from "flexible" to "permanent" seat assignment occurs when the passenger passes his/her boarding pass through the boarding pass reader **160** at the point of embarkation (**620**). In this embodiment, not every flexible seat assignment is converted in a permanent seat assignment at once. Instead, only the seat assignment of the passenger boarding the aircraft at that moment becomes permanent. The boarding pass reader **160** decodes and evaluates the information on the boarding pass and accesses the airline reservation central controller **100** to convert the flexible seat assignment to a permanent seat assignment and prints the permanent seat assignment on the boarding pass. As passengers board the aircraft and pass their non-confirmed boarding passes through the boarding pass reader **160**, their seats become permanent and can no longer be reassigned by the central controller **100**. However, the check-in controller **150** can still reassign those passengers who have not yet boarded

the aircraft, in order to accommodate a passenger's request received during the check-in process.

In one embodiment, the transition point can be defined by each airline and can be flight specific, allowing for greater flexibility and increased customer service.

While the embodiments of the invention have been described with reference to an airline reservation system that supports guaranteed reservations for a preferred category of seating, the method and apparatus described herein are equally applicable to other types of reservation systems wherein requests for a preferred category of service are made. For example, in one embodiment, the category of service can include assigned seating within different categories of seats or assigned rooms within different categories of rooms. Also, various services that may support guaranteed reservations for a preferred category of service include hotel rooms, seating in stadiums and arenas, seating in concert halls, and seating in a vehicle of transportation.

It is to be understood that the embodiments and variations shown and described herein are merely illustrative of the principles of the present invention. Therefore, various adaptations and modifications may be implemented by

those skilled in the art without departing from the spirit and scope of the present invention.